

PATENT ABSTRACTS OF JAPAN

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(54) MULTILAYER ARTIFICIAL BLOOD VESSEL

(57)Abstract:

PURPOSE: To improve suture strength and blood leak resistance so as to ensure infiltration of a cell by constituting a porous polyethylene tetrafluoride tube of at least two layers of multilayer tubes having a different hole bore, in the case of an artificial blood vessel formed by compounding the porous polyethylene tetrafluoride tube and a material originated from living body.

CONSTITUTION: A multilayer artificial blood vessel is formed of outer and inner layers 1, 2, and it is preferable that a hole bore (fiber length) of the outer layer 1 is larger than a hole bore (fiber length) of the inner layer 2. The hole bore of the inner layer 2 is 30 to 40 μ m and about 0.1 to 0.9kg/cm² in the conversion to a bubble point. The hole bore of the outer layer 1 is preferable larger than the inner layer 2 by 30 to 60 μ m. In this way, a vascular endothelial is early formed and held stably for a long period by improving infiltration of the cell and a capillary vessel from the outside.

